

### **REMARKS**

Claims 1, 6 – 9 and 17 are pending and under consideration.

In the Office Action, Claims 1, 6 – 9 and 17 were rejected.

In the amendment, Claims 1 and 17 are amended. No new matter has been introduced as a result of this amendment.

Accordingly, Claims 1, 6 – 9 and 17 remain at issue.

#### **I. 35 U.S.C. § 103 Obviousness Rejection of Claims 1, 7 – 9 and 17**

Claims 1, 7 – 9 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ota et al. ("Ota") (JP 2002-16362) in view of Kodai (U.S. Patent No. 5,026,452).

Claim 1 is directed to an IC card comprising an IC module which comprises an IC chip mounted on an insulating substrate having an antenna coil, *a sealing material which encapsulates the IC chip*, and a chip reinforcing plate provided on at least an IC mounted surface of the insulating substrate *and formed on the IC chip through the sealing material*; and a core layer comprising a plurality of sheet materials having the IC module disposed therebetween, wherein, in the plurality of sheet materials, at least the sheet materials adjacent to the IC module have a through hole (a) for containing therein the IC chip *the sealing material* and the chip reinforcing plate, and (b) formed to penetrate the adjacent sheet materials in a region corresponding to an IC mounted portion of the IC module before placing the IC chip therein, the plurality of sheet materials constituting the core layer comprise at least a pair of inner core sheets adjacent to the IC module, a relationship of  $(B1 + C1) - 20 \mu\text{m} \leq A \leq (B1 + C1) + 10 \mu\text{m}$  is satisfied, where A ( $\mu\text{m}$ ) represents the sum of heights of the through holes, B1 ( $\mu\text{m}$ ) represents a projection height on an IC mounted surface of the IC module, and C1 ( $\mu\text{m}$ ) represents a projection height on an IC non-mounted surface of the IC module, the relationships  $B = B1 \pm 30 \mu\text{m}$ , and  $C = C1 \pm 30 \mu\text{m}$  are satisfied, wherein B ( $\mu\text{m}$ ) represents a height of the through hole on the side of the IC mounted surface of the IC module, and C ( $\mu\text{m}$ ) represents a height of the through hole on the side of the IC non-mounted surface of the IC module, *and the through holes*

*are larger than at least one of a length and a width of the sealing material and the chip reinforcing plate.*

That is, as shown in FIG. 6 and discussed in Paragraph [0047] of the present application, the through hole is larger than at least one of a length and a width of the sealing material and the chip reinforcing plate.

In contrast, both Ota and Kodai fail to teach or suggest through holes that are larger than at least one of a length and a width of the sealing material and the chip reinforcing plate. As shown, in FIGS. 1 – 4 and 7 – 8 of Ota, the reinforcing plates 9 and 9' and the closure resin 7 and 7' fill completely their corresponding through holes formed in sheets 15 and 16. In addition, as shown in FIGS. 1 – 8B of Kodai, the IC module 2 fills completely the trough holes 7. As such, Ota and Kodai, taken singly or in combination with each other, fail to teach or suggest all of the limitations of Claim 1.

Thus, Claim 1 is patentable over Ota in view of Kodai, as are dependent Claims 7 – 9 for at least the same reasons.

Claim 17 amended to recite the same distinguishable limitation as that of Claim 1 is therefore patentable over Ota and Kodai.

Accordingly, Applicants respectfully request that these 35 U.S.C. § 103 claim rejections be withdrawn.

## **II. 35 U.S.C. § 103 Obviousness Rejection of Claim 6**

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ota, et al./Ramachandran, in view of Saito et al. (JP 11078324).

Claim 6 is dependent on Claim 1 shown above to be patentable over Ota and Kodai.

Moreover, in addition to Ota and Kodai Saito also fails to teach or suggest that the through holes of an IC card are larger than at least one of a length and a width of the sealing

material and the chip reinforcing plate of an IC module. As such, Claim 1 is patentable over Ota Kodai and Saito, taken singly or in combination with each other, as is dependent Claim 6 for at least the same reasons.

Accordingly, Applicants respectfully request that these 35 U.S.C. § 103 claim rejections be withdrawn.

### III. Conclusion

In view of the above amendments and remarks, Applicant submits that Claims 1, 6 – 9 and 17 are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

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